#### REMARKS

Claims 1-3, 5-7, 9-12, 14-16, and 18 are now present in this application.

The title, specification, and claims 1-3, 5-7, 9-12, 14-16 and 18 have been amended, and claims 4, 8, 13 and 17 have been cancelled without prejudice or disclaimer of the subject matter contained therein. Reconsideration of the application, as amended, is respectfully requested.

# Claim for Foreign Priority

The Examiner has checked box 12 a), acknowledging the claim for foreign priority. However, the Examiner has not checked the box to confirm that the certified copies of the priority document have been received. It is therefore respectfully requested that the Examiner specifically acknowledge receipt of the certified copy of the priority document, which was submitted on June 28, 2001.

### Objection to the Title

The title stands objected to as not being descriptive. In view of the foregoing amendments, it is respectfully submitted that the title is descriptive. Reconsideration and withdrawal of any objection to the title are respectfully requested.

## Rejection under 35 USC 101

Claims 1-18 stand rejected under 35 USC 101. This rejection is respectfully traversed.

It is respectfully submitted that the claims are limited to a particular technology of software diagnose and indeed produce useful, concrete and tangible results. The invention relates to  ${\bf a}$ system and method for diagnosing software on a computer, or as stated in the preamble of claims, a software diagnosing system and method executing on a computer. The system generates events to diagnose the software by utilizing production weights of events as an event-generating guide so all the important functions of the software are completely tested. Therefore, it is evident that the invention does not merely perform a purely mathematical algorithm since the calculation of the production weight is not the final purpose of the invention but is the guide to achieve the final purpose of the invention. Further, since the system and method according to the invention allow the software designer to save time in software testing and enables complete testing with respect to the important function of the software, the claimed invention as a whole indeed produces a useful, concrete and tangible result and accomplishes a practical application. State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02. Accordingly, reconsideration and withdrawal of the 35 USC 101 rejection are respectfully requested.

### Rejection under 35 USC 102(e)

Claims 1-18 stand rejected under 35 USC 102(e) as being anticipated by KIM et al., U.S. Patent 6,016,474. This rejection is respectfully traversed.

Independent claim 1 has been amended to describe a software diagnosing system including an event ratio-calculating module for calculating a production weight of each event basing on the ratio of each program segment to the un-debugged software and on the ratio of each event with respect to each program segment; and an event-generating module for generating events according to their respective production weights to diagnose the un-debugged software, wherein each of events is randomly selected from a set of events.

Further, independent claim 10 has been amended to describe that a software diagnosing method includes the steps of calculating a production weight of each event basing on the ratio of each program segment to the un-debugged software and on the ratio of each event with respect to each program segment; and generating events according to their respective production weights to diagnose the un-debugged software, wherein each of events is randomly selected from a set of events.

It is respectfully submitted that KIM et al. does not teach or disclose each of the claimed elements as now in the present application.

In KIM et al., a tool and method for diagnosing and correcting errors in a computer program are disclosed. The tool diagnoses the computer program by accepting user commands through the graphical user interface and displaying critical debugging information using the same. The tool mainly maps out the relationships between functions at multi-levels and operates on predetermined debugging commands.

However, KIM et al. does not disclose a system or method for diagnosing software through automatically generating events base on event production weight that is assessed by considering the relationships between the events and the program segments. Furthermore, KIM et al. does not disclose the relationship between the events, the segments, and the un-debugged software in terms of numbers, which the invention has done in order to help randomly select and generate events to test the software more precisely. The production weight, which is used to be the guide for generating events, is calculated by using the ratio of each program segment to the software and the ratio of each event with respect to each related program segment.

Accordingly, it is respectfully submitted that independent claims 1 and 10, as well as their dependent claims, are neither taught nor suggested by the prior art utilized by the Examiner. Reconsideration and withdrawal of the 35 USC 102(e) rejection are respectfully requested.

Because the additional prior art cited by the Examiner has been included merely to show the state of the prior art and has not been utilized to reject the claims, no further comments concerning these documents are considered necessary at this time.

In the event that any outstanding matters remain in this application, the Examiner is invited to contact the undersigned at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachments: Replacement Drawing Sheets